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#### TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

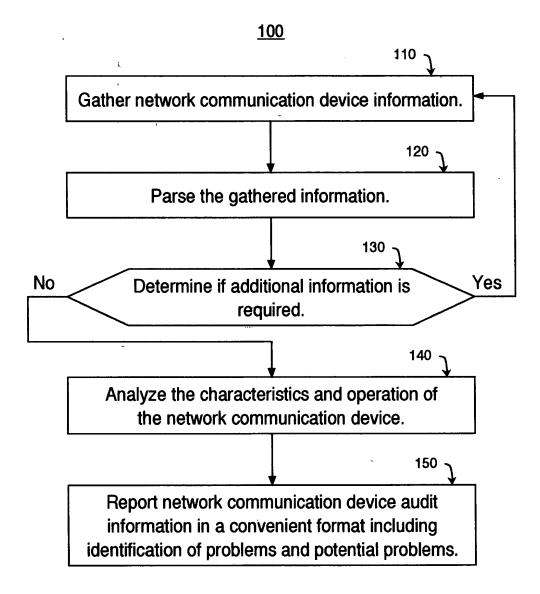


FIG. 1

Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

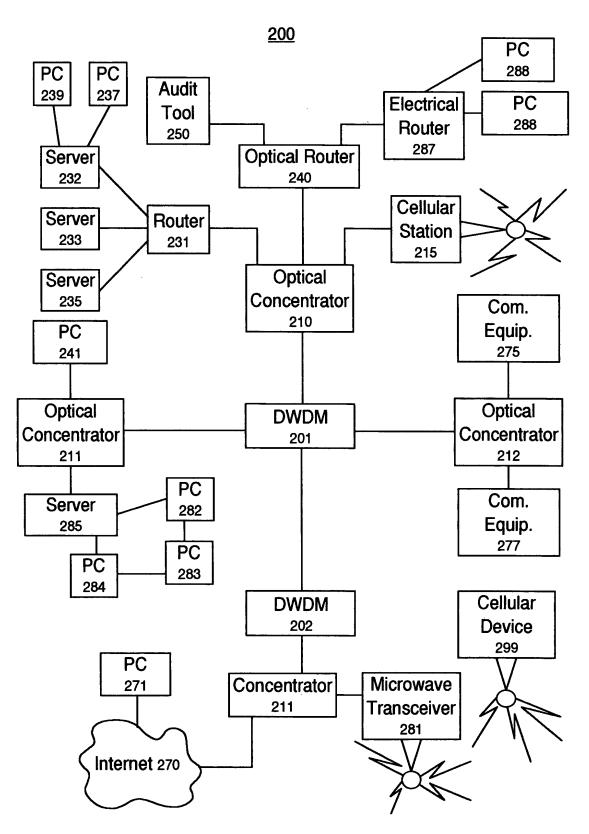


FIG. 2A

Inventor(s): Joe DEPAOLANTONIO 9/828,022 Attorney Docket #: CSCO-3809 USSN: 09/828,022

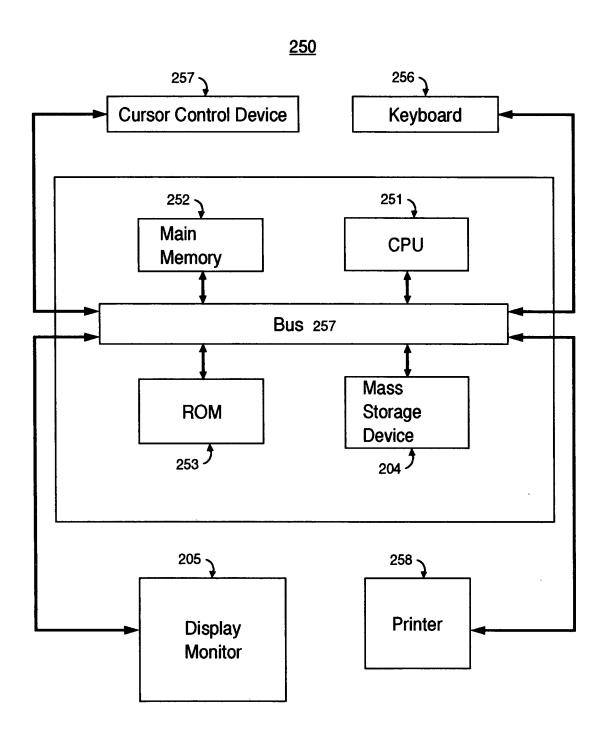


FIG. 2B

Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

4/31

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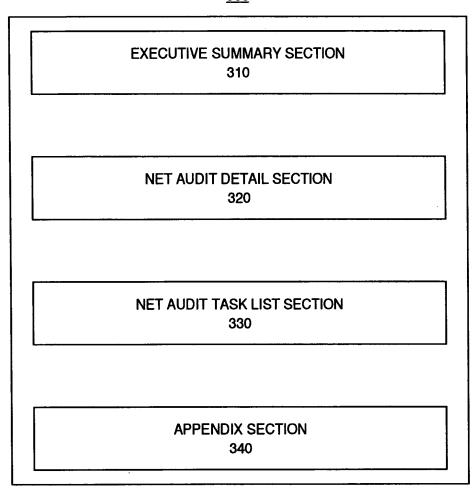


FIG. 3

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5/31

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INTRODUCTION TO NETWORK DEVICE AUDIT 410

NETWORK AUDIT DATA COLLECTION SUMMARY 420

NETWORK AUDIT DATA COLLECTION GRAPH 430

NETWORK AUDIT NREP SUMMARY 440

FIG. 4A

Inventor(s): Joe DEPAOLANTONIO
USSN: 09/828,022 Attorney Docket #: CSCO-3809

6/31

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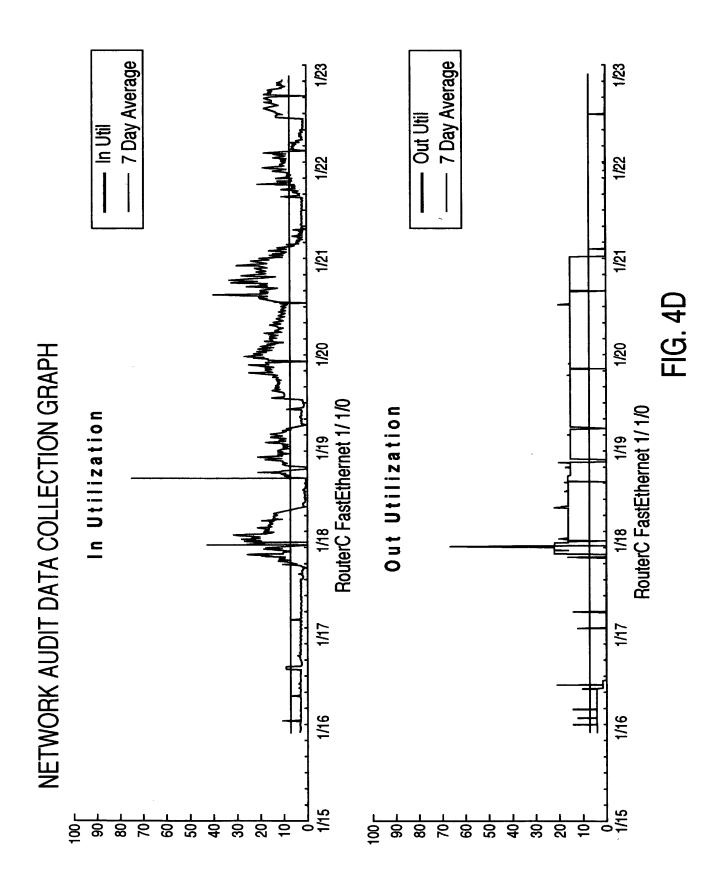
Optional 15454 network audit provides a convenient identification of the network categories (configuration management, fault management, performance management optical concentrators included in a network and assessment of those network optical report assesses the health of these devices according to four network management and capacity management) in a convenient format. concentrators. Network optical concentrators \_\_

## FIG. 4B

_					
NETWORK AUDIT DATA COLLECTION SUMMARY TABLE					
NETWORK AUDIT DA	Collection Period	Collection Start Time	Collection Stop Time	Unreachable Nodes	

FIG. 4C

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		NETWORK AUDIT NREP SUMMARY	
	Status Indicator	or Status Identification	Points Assigned
₹⊅	Warning	Warning indications appear in data tables highlighted in yellow with bolded font. Warning indications mark possible problematic areas and should be investigated.	
	Critical	Critical indications appear in data tables highlighted in red with bolded font. Critical indications mark conditions that require immediate attention.	nt. 1000
\$ <del>1</del>	NET AUDIT HEALTH: Note: Net Audit He	' AUDIT HEALTH: 78% Note: Net Audit Health % = 100-((Total NREPs/Total Possible NREPs) x 100)	
·	NREP Summary Table	ary Table	
£ <b>7</b> ;	ďŠμ	Critical NREPs: 35,789 Warning NREPs: 58,897 Total NREPs: 94,686	
₹ <b></b>	NREPs Ratio by (	NREPs Ratio by Category Graph	
₹7	Notes:		
<u> </u>	NODE CORRELA	NODE CORRELATION TABLE	
47		Overall Performance Fault Capacity Planning Configuration	Total
	Node Name	**********	k NREPs Hank

9/31

#### 500

Confi	guration Management Section 510
System	511
Media	512
Protocol	513
Node	514

F	Fault Management Section 520
System	521
Media	522
Protocol	523
Node	524

Perfo	rmance Management Section 530
System	531
Media	532
Protocol	533
Node	534

Ca	pacity Management Section 540
System	541
Media	542
Protocol	543
Node	544

USSN: 09/828,022 Attorney Docket #: CSCO-3809

Value System NREPs: Configuration Component Name Total NREPs Value Capacity Planning Component Name Total NREPs Model: 009 Value Performance Component Name Total NREPs Value SUBIMPACT AREA: Component Name Fault Total NREPs

FIG. 6

Inventor(s): Joe DEPAOLANTONIO 9/828,022 Attorney Docket #: CSCO-3809 USSN: 09/828,022

STM Mode Timing Mode			Serial Hardware Firmware Board Number Version Version Status			Synchronization	Framing Primary Second Third
710 Node ID	FIG. 7A	720	Part Number	FIG. 7B	730	rence BITS-2 Reference	Framing Line code Fre
able			Network Element Board Name Stot Name Name		ization Reference Table	t Name BITS-1 Reference	Ling code   F
Network Element Table  Network Element N		Board Table	Network Elemen Name		BITS and Synchronizatio	Network Element Name	

Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Network Element Protection Table	Table	7	740			
Network Element Working Slot Name Number		Protection Slot Number	Protection Group	Protection Name	Revertive Mode	Revertive Time (mins)
		FIG	FIG. 7D			
Optical Facilities Protection Table	Table	7	750			
Network Element W	Working Facility	Protection Protection Facility	Protection R	Revertive F	Revertive Time (mins)	Bi-directional Switch Mode
		FIG	FIG. 7E			
Cross Connect Table		7	760			
Network Element Name		From STS Cross Connect		To STS Cross Connect	Cusso	Gross Connect Type
		FIG	FIG. 7F			

Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

13/31

DS3 Service Parameters Table  DS3 Service Parameters Table  Name  Name  Name  Name  Name  Name  Source Table  Port Number  FIC  FIC  FIC  Span  Span  Span  Span  Mumber Number DCC  Span  Span  Span  Mumber Number DCC  Span  Span	Slot Number Port Number Stot Number Port Number Number Port Number Port Number Num	Fort Number Light FlG.  Fig. Restore Switch Wait To Switch Main To Main T	ne Type No Typ	Line Code  Signal Signal California Californ	Circuit Line Buildout Buildout For Signal Degrade	Circuit Line Primary Service  Buildout State  Circuit Line Primary Service  Buildout State  State  Statio  Fatio For Mode Wave Protection Protection Fatio For Status  Status  Status	Group Startus
--	--	--	--	--	---	---	---------------

FIG. 7

	Description Recommendation			Alarm Status	
810	Firmware Software Des Version Version	FIG. 8A	820	Slot Number	FIG. 8B
Notice Table	Card Type Hardware Fin Version Ve			me Board Name	
Network Element Field Not	Field Notice Card Number		Alarm Status Table	Network Element Name	

Inventor(s): Joe DEPAOLANTONIO

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Electrical Performance Table Near End	pu		910				
Network Element Facility Slot Name Number	Stot Port Coding Errored Number Widelions Seconds	Coding	Errored	Coding Errored Severely Errored Severely Errored Unavailable Violations Seconds Seconds Frame (AIS) Seconds	Severely F Frame (	everely Errored Unavailat Frame (AIS) Seconds	navailable econds
		FIG. 9A	<b>⋖</b>				
Optical Performance Table Near End		<b>U</b>	920				
Network Element Facility Slot Name Numb	Slot Port Number Number	Coding er Violations		E00000000000000000000000	Severely Errored Unavailable Seconds Seconds	navailabk	e Seconds
		FIG. 9B	<b>B</b>				
Optical Performance Table Far End		<b>.</b>	930				
Network Element Facility Slot Name Number	Port Number	Coding	ns Seconds		Severely Errored Unavailable Seconds Seconds	navailabik	Spirotes e

FIG. 90

Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Engineer / Audit Comments and Net Advice Available Slots Slot Number Used FIG. 10A Field Name | Frequency | Appendix Reference | 1020 1010 Board Name Network Element Capacity Table Network Element Name Net Audit Task List Table Node

FIG. 10B

#### 17/31

Appendix D - Device Unreachable Table

1030

Failure		
eason for		
ation 2: F	router	C2900
<u> </u>	<u>5</u>	S
Failur		
on for		
Heas		
tion 1.	တ္သ	တ္သ
Itera	PASS	PASS
dress		
r IP A(		
o aur	_	_
ostna	outer	outer

The Failure Type is one of the following:

Duplicated\_Fail

Device in the list more than once and data was unsuccessfully collected.

Duplicated\_Pass

Device in the list more than once and data was successfully collected.

FAIL Device either had unknown IDs or passwords, or could not be reached due to network problems.

Not Used

Device was in the initial audit request but was not in the device list at the time of the collection

Device is a 29xx switch, not a router. NATkit will be corrected in the future to properly classify the 29xx switches, so that they do not appear in the Router Stability Net Audit.

Incomplete Command Set

During the data collection, one or more commands were not retrieved from the router, most likely because the connection between the NATkit and the router failed.

Fig. 10C

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<	-ALL:123::15MIN:		1111
NODE 3 1970-01-02 18:0	04:02		
M 123 COMPLD 1H 2H			
"FAC-5-1:SEFS,6,COMP	L,NEND,15MIN,BTH"		
"FAC-5-1:CVL,0,COMP,I	NEND,15MIN,BTH"		
"FAC-5-1:ESL,6,COMPL	,NEND,15MIN,BTH"		
"FAC-5-1:SESL,6,COMP	L,NEND,15MIN,BTH"		1112
"FAC-5-1:UASL,0,COMP	L,NEND,15MIN,BTH"		
"FAC-5-1:FCL,1,COMPL	,NEND,15MIN,BTH"		
<b>4.</b> .	COMPL,NEND,15MIN,RCV'	1	
"FAC-5-1:PPJC-PDET,0,	COMPL,NEND,15MIN,RCV"		
"FAC-5-1:NPJC-PGEN,0	,COMPL,NEND,15MIN,TRUT		
"FAC-5-1:PPJC-PGEN,0	,COMPL,NEND,15MIN,TRUT		
"FAC-5-1:CVL,0,COMPL	,FEND,15MIN,BTH"		
"FAC-5-1:ESL,0,COMPL	,FEND,15MIN,BTH"		
14H "FAC-5-1:SESL,0,COMP	L.FEND.15MIN.BTH"		
	—,· —· · — , · - · · · · · · · · · · · · · · · · ·		
15H "FAC-5-1:JASL,0,COMP			
15H	L,FEND,15MIN,BTH"		
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL	L,FEND,15MIN,BTH"	Output	_
15H "FAC-5-1:JASL,0,COMPI 16H	L,FEND,15MIN,BTH" ,FEND,15MIN,BTH"	Output CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL Index Number	L,FEND,15MIN,BTH" ,FEND,15MIN,BTH" Field Name		
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL Index Number 1H	L,FEND,15MIN,BTH" ,FEND,15MIN,BTH" Field Name Factory	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL Index Number 1H 2H 3H	L,FEND,15MIN,BTH"  ,FEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND	CER_MA_PM_OP CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H	L,FEND,15MIN,BTH"  ,FEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H	L,FEND,15MIN,BTH"  ,FEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H	L,FEND,15MIN,BTH"  ,FEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	1113
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H	L,FEND,15MIN,BTH"  ,FEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND NPJC_RCV	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H	L,FEND,15MIN,BTH"  FIEND,15MIN,BTH"  Field Name Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV	CER_MA_PM_OP	11113
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H	L,FEND,15MIN,BTH"  FIELD NAME Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND UASL_NEND FCL_NEND NPJC_RCV NPJC_TRMT	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H	L,FEND,15MIN,BTH"  FIEID Name Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H 9H 10H	L,FEND,15MIN,BTH"  FIEID Name Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H 9H 10H 11H	L,FEND,15MIN,BTH"  FIEID Name Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND IUASL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT CVL_FEND ESL_FEND ESL_FEND	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H 9H 10H 11H 12H	L,FEND,15MIN,BTH"  FIELD NAME Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND UASL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND ESL_FEND SESL_FEND SESL_FEND	CER_MA_PM_OP	
15H "FAC-5-1:JASL,0,COMPL 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H 9H 10H 11H 12H 13H	L,FEND,15MIN,BTH"  FIEID Name Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND IUASL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT CVL_FEND ESL_FEND ESL_FEND	CER_MA_PM_OP	1113
15H "FAC-5-1:JASL,0,COMPI 16H "FAC-5-1:FCL,0,COMPL  Index Number 1H 2H 3H 4H 5H 6H 7H 8H 9H 10H 11H 12H 13H 14H	L,FEND,15MIN,BTH"  FIELD NAME Factory SEFS_NEND CVL_NEND ESL_NEND UASL_NEND UASL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND ESL_FEND SESL_FEND SESL_FEND	CER_MA_PM_OP	

FIG. 11B

Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

				1131	<b>}</b> _	1132	1		_	9	551	<b>L</b>	_									
	Unavailable	Seconds		CER_MA	_PM_OP	Index 15H	_	If the number	exceeds 3 for	a 15 min.	interval or	exceeds 10	for a 1 day	interval, flag	RED		,		,			
	Severely	Errored	Seconds	CER_MA	_PM_OP	Index 14H	1	If the number If the number If the number	exceeds 1 for exceeds 3 for	a 15 min.	interval or	exceeds 4	for a 1 day	interval, flag	RED							
	Errored	Seconds		CER_MA	PM_OP	Index 13H	1	If the number	exceeds 87	for a 15 min.	interval or	exceeds 864	for a 1 day	interval, flag	RED							
ar End	Coding	Number Number Wolations		CER_MA_PM_OP	INV PM OP PM OP	Index 12H		OC3 interfaces	If the number exceeds	1312 for a 15 min. interval	or exceeds 13,120 for a 1	day interval, flag RED.	OC12 interfaces	If the number exceeds	5315 for a 15 min. interval	or exceeds 53,250 for a 1	day interval, flag RED.	OC48 interfaces	21,260 for a 15 min.	interval or exceeds	212,600 for a 1 day	interval, flag RED.
e Table - F	Port	Number		CER MA	PM OP	Index 1H	_															
Optical Performance Table - Far End		Number		CER MA	PM OP	Index 1H Index	5															
Optical Po	Network Facility   Slot	A. A. A. A.		CER MA	N	Index 2A	OC-48															
	Network	Element	Namë 🖈				NODE 1 OC-48															

FIG. 11C

Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

COMMAND	RETRIEVED INFORMATION
RTRV-INV::SLOT-xxx:yyy;	Slot number, Card Type, Part Number, Hardware Version, Firmware Version, and Serial Number.
RTRV-NE:::;	Internet Protocol (IP) Address, Synchronous Transfer Mode, Node Identification (ID), and Timing Mode.
RTRV-EQPT::SLOT-xxx:yyy;	Slot Number, Card Type, and Card Status.
RTRV-BITS::BITS-NE:xxx:yyy;	BITS Reference Number, Line Coding, and Frame Format.
	Synchronization Sources such a First Primary Synchronization Source, Second Synchronization Source.
RTRV_ALM-ALL:::yyy;	Alarms and associated Slot Numbers.
RTRV-TOD:::yyy;	Time of Day
RTRV-PM-OCvv:: FAC-xxx-ALL:yyy::,,,,zzz,,;	Facility and Near End and Far End performance such as transmission and reception Severely Errored Framing Second (SEFS), Line Coding Violation (CVL), Line Errored Second (ESL), Line Severely Errored Second (SESL), Path Unavailable (UASP), Path Coding Violation (CVP), Path Second Errored Second (ESP), and Path Severely Errored Second (SESP). Transmission and reception NPJC and PPJC information.
RTRV-PM-TI: FAC-xxx- ALL:yyy::,,,,zzz,,;	Facility and Near End performance such as transmission and reception Severely Errored Framing Second (SEFS), Line Coding Violation (CVL), Line Errored Second (ESL), Line Severely Errored Second (SESL), Line Unavailable Second (UASL) and Line Failure Count (FCL). Transmission and reception NPJC and PPJC information.
RTRV-OCvv:: FAC-xxx-ALL:yyy::,,,,zzz,,;	Facility, Section DCC Enabled, Timing Source for TCC/TMG Card, Span Switch Wait to Restore Time, STA Monitored Facility for Pointer Justifications, Signal Failure Bit Error Ratio, Signal Degrade Bit Error Ratio Threshold, Facility state, Protection Group Role, and Protection Croup Status
RTRV-T3:CERENT:FAC-xxx- y:zzz:::; or RTRV-T1:TID:FAC-vv- luu:yyyy;	Facility, Line Type, Line Coding, Line Buildout, and Primary Service State.
RTRV-FFP-EQPT::SLOT-vv:yyy;	Working Slot Number, Protection Slot Number, Protection Group, Protection name, Revertive Mode, and Revertive Time.
(A)	Continued on sheet 22 of 31 ———————————————————————————————————

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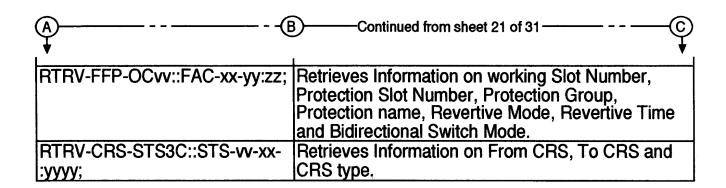


FIG. 11D (Continued)

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Net Rule	Heading	Description
OC3 Interfaces	Optical	For OC3 Interfaces
If the number exceeds 1312 for a 15 min.	Performance	If the number exceeds 1312 for a 15 min. interval or
interval or exceeds 13,120 for a 1-day interval	Table Near and	exceeds 13,120 for a 1-day interval are bolded red
OC12 Interfaces	Far end coding	For OC12 Interfaces
If the number exceeds 5315 for a 15 min.	Violations	If the number exceeds 5315 for a 15 min. interval or
interval or exceeds 53,250 for a 1-day interval		exceeds 53,250 for a 1-day interval are bolded red
OC48 Interfaces		For OC48 Interfaces
If the number exceeds 21,260 for a 15 min.		If the number exceeds 21,260 for a 15 min. interval or
interval or exceeds 212,600 for a 1-day interval		exceeds 212,600 for a 1-day interval are bolded red
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 13,340 for a 15 min.	Performance	If the number exceeds 13,340 for a 15 min. interval or
interval or exceeds 133,400 for a 1-day interval	Near End Table	exceeds 133,400 for a 1-day interval are bolded red.
DS-3 Interfaces	Coding	For DS-3 Interfaces
If the number exceeds 387 for a 15 min.	Violations	If the number exceeds 387 for a 15 min. interval or
interval or exceeds 3865 for a 1-day interval		exceeds 3865 for a 1-day interval are bolded red.
EC-1 Interfaces		For EC-1 Interfaces
If the number exceeds 1312 for a 15 min.	ť	If the number exceeds 1312 for a 15 min. interval or
interval or exceeds 13,120 for a 1-day interval		exceeds 13,120 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 387 for a 15 min.		If the number exceeds 387 for a 15 min. interval or
interval or exceeds 3865 for a 1-day interval		exceeds 3865 for a 1-day interval are bolded red.
j		(F)
•	Fig. 11E	
	- - - 	

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⊕		(F)
If the number exceeds 87 for a 15 min.	Optical	If the number exceeds 87 for a 15 min. interval or
interval or exceeds 864 for a 1-day interval	Performance	exceeds 864 for a 1-day interval are bolded red
	Table Near and	
	Far end Errored	
	Seconds	
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 65 for a 15 min.	Performance	If the number exceeds 65 for a 15 min. interval or
interval or exceeds 648 for a 1-day interval	Near End Table	exceeds 648 for a 1-day interval are bolded red
DS-3 Interfaces	Errored Seconds	DS-3 Interfaces.
If the number exceeds 25 for a 15 min.		For DS-3 Interfaces
interval or exceeds 250 for a 1-day interval		If the number exceeds 25 for a 15 min. interval or
EC-1 Interfaces		exceeds 250 for a 1-day interval are bolded red.
If the number exceeds 87 for a 15 min.		For EC-1 Interfaces
interval or exceeds 864 for a 1-day interval	ę.	If the number exceeds 87 for a 15 min. interval or
DS3XM-6 Interfaces		exceeds 864 for a 1-day interval are bolded red.
If the number exceeds 25 for a 15 min.		For DS3XM-6 Interfaces
interval or exceeds 250 for a 1-day interval		If the number exceeds 25 for a 15 min. interval or
		exceeds 250 for a 1-day interval are bolded red.

Fig. 11E (Continued)

## TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Net Rule	Heading	Description
DS1 Interfaces	Severely Errored	For DS1 Interfaces
If the number exceeds 10 for a 15 min.	Frame (AIS)	If the number exceeds 10 for an15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
OS3 Interfaces		For DS-3 Interfeces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
EC1 Interfaces		For EC-1 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
If the number exceeds 1 for a 15 min.	Optical	If the number exceeds 1 for a 15 min. interval or
interval or exceeds 4 for a 1-day interval	Performance	exceeds 4 for a 1-day interval are bolded red.
	Table Near and	
	Far end Severely	
	Errored Seconds	
<b>→</b>		Continued on sheet 26 of 31 — ——————————————————————————————

#### TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

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DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 10 for a 15 min.	Performance	If the number exceeds 10 for a 15 min. interval or
interval or exceeds 100 for a 1-day interval	Near End Table	exceeds 100 for a 1-day interval are bolded red.
DS-3 Interfaces	Severely Errored	For DS-3 Interfaces
If the number exceeds 4 for a 15 min.	Seconds	If the number exceeds 4 for a 15 min. interval or
interval or exceeds 40 for a 1-day interval		exceeds 40 for a 1-day interval are bolded red.
EC-1 Interfaces		For EC-1 Interfaces
If the number exceeds 1 for a 15 min.		If the number exceeds 1 for a 15 min. interval or
interval or exceeds 4 for a 1-day interval		exceeds 4 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 4 for a 15 min.		If the number exceeds 4 for a 15 min. interval or
interval or exceeds 40 for a 1-day interval		exceeds 40 for a 1-day interval are bolded red.
	Slot Number	Displays Slot Number
W	(V)	——————————————————————————————————————

Fig. 11F (Continued)

#### TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

(N)		(N)
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 3 for a 15 min.	Performance	If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval	Near End Table	exceeds 10 for a 1-day interval are bolded red.
DS-3 Interfaces	Unavailable	For DS-3 Interfaces
If the number exceeds 3 for a 15 min.	Seconds	If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
EC-1 Interfaces		For EC-1 Interfaces
If the number exceeds 3 for a 15 min.		If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
If the number exceeds 3 for a 15 min. interval or	Optical	If the number exceeds 3 for a 15 min. interval or
exceeds 10 for a 1-day interval	Performance	exceeds 10 for a 1-day interval are bolded red
	Table Near and	
	Far end	
	Unavailable	
	Seconds	

Fig. 11F (Continued)

## TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Recommendation	Old revision boards will not operate with CTC 2.2. It is important to understand that without the upgraded cards Ethernet traffic will not operate using CTC 2.2 If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368	This issue has been corrected in the current release of all OC-12 cards (Part # 800-06758-02, 800-06759-02) and all subsequent versions. If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368	©
Description	Incorrect coding in C2 byte of obtical backbone facility. All version of the E100T card prior to 800-06747-05 A0 will require a hardware upgrade to support features introduced in version 2.2 CTC (Cisco Transport Controller) and later	Bit errors may be seen on an OC-12 card when the incoming line frequency is less than the NE's internal; clock by more than 4ppm. This can happen as a result of synchronization problems in the network, or if the node is operating in free running synchronization timing references drift off frequency by 4ppm or more, or when networks are configured to free running synchronous mode.	Continued on sheet 29 of 31
Software Version	NA	N/A	Cont
Firmware Software Version Version	N/A	N/A	
Hardware Version	E100T 800-06747-05 A0 or prior	800-06758-01 A0 800-06759-01 A0 800-06760-01 A0	) 
Card Type	E100T	OC12 Cards	 
Field Notice Card Number Type	12851	<u>0</u>	

USSN: 09/828,022

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)	Screen each node to determine if these defective TCCs are present and replace them if they are identified to contain the defective component. If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368
——Continued from sheet 28 of 31	While performing a software upgrade to specific TCCs or activating software on specific TCCs these processes may fail Additional failure symptoms could include unexplained resets of the TCC.
	N/A
	N/A
	TCC Serial number N/A card ranges of 31550 and 45500 and FAA04280001 through FAA0430A4BA
	card
	12652

FIG. 12 (Continued)

## TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

30 / 31				
Net Advisor	Include ?	>	>	
Net Audit Version 4	Net Advice	Verify the current value set and investigate why it has changed from default. In some networks, turning is advantageous and values other than default are acceptable.	Verify the current value set and investigate why it has changed from default. In some networks, tuning is advantageous and values other than default are acceptable	
	Net Info	hourly Bit Error Ratio For Signal Fail - the default value is 1E-4. It has been set and investigate determined that your value is something other than the default. In some the default of the default value is 1E-7. It has been advantageous and determined that your value is something other than the default.	hourly Line type - the default value for all DS and EC interfaces except the SaxM-6 is D4. The default value it has changed for the DS3XM-6 is C Bit. It has been default. In some determined that your value is something other than the default value for all DS3XM-6 is AMI. The default value default are accept the DS3XM-6 interfaces except the default are accept the DS3XM-6 interface is B3ZS. It has been determined that your value is something other than the default.	
	Poll Freq	hourly	hourly	
	MIB (If applicab (e)			
	Sub	System Media	System	
	Section Section	Perform System ance Media Cofigur ation Fault	Perform System ance Media Cofigur ation Fault	
	Key Variable (s)			
	Command	RTRV-OC48:: FAC-6-1:236;	CERENT:FAC-1-2:123::::;	

Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

	31/31				
 		>			
		Verify the current value set and investigate why it has changed from default. In some networks, tuning is advantageous and values other than default are acceptable			
Continued from sheet 30 of 31	Circuit Line Buildout - the default value for DS-1 interfaces is 0-131. The default value for EC-1 and DS-3 interfaces is 0-255. The default value for the EC1-12 interface is 0-255. It has been determined that your value is something other than the default.	hourly Line type - the default value for all DS and EC interfaces except the DS3XM-6 is D4. The default value for the DS3XM-6 is C Bit. It has been determined that your value for the DS3XM-6 is AMI. The default value for the DS3XM-6 interfaces except the DS3XM-6 interface is B3ZS. It has been determined that your value is something other than the default value for DS-1 interfaces is 0-131. The default value for DS-1 interfaces is 0-255. The default value for the EC1-12 interface is 0-255. It has been determined that your value is something other than the default.			
ې ا		hourly			
		System			
		Perform System ance Media ation Fault			
!					
		FAC-2-1:1223::::;			
$\ominus$		œū			

FIG. 13 (Continued)